Abstract

Graphs have become popular for modeling structured data such as chemical coumpounds. Database technologies such as relational databases are less effective to handling structured data. then, graph database is needed.To handle the information search against structured data in databases used graph indexing methods for more quickly and efficiently.

Of the several methods of indexing the existing graph, tree Closure (C-tree) is a graph indexing method most appropriate to use as it uses the concept of closure in which each node graph summarizes information from nodes offspring, and build tree as a index. In this final project is expected to implement the C-tree algorithm on the graph indexing with the dataset type of molecule and analyze answer set, tree construction, and query time.

Keywords: graph, graph databases, graph indexing, graph closure, C-tree.